

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

SEM-1068

B.A. LL.B. (Honours Course) IVth Semester Examination, 2022

COMPUTER-II

Paper - 4.1

Time : 3 Hours]

[Maximum Marks : 70

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* parts (i) to (x) of Q. No. 1 (Answer limit **50** words). Each part carries **2** marks.

Section-B

(Marks : 4 × 5 = 20)

Note :- Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **4** marks.

Section-C

(Marks : 10 × 3 = 30)

Note :- Answer any *three* questions out of five (Answer limit **500** words). Each question carries **10** marks.

Section-A

1. (i) What do you mean by schema ?
- (ii) What kind of file structures a relational model use ?
- (iii) What is the main benefit of using database systems over traditional file systems ?

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- (iv) Define entity type.
- (v) Write *two* advantages of using normalization.
- (vi) Write any *three* data types while creating tables.
- (vii) Write the syntax to drop a column from a table in SQL.
- (viii) What do you mean by Nested Queries ?
- (ix) Define deadlock in transaction based systems.
- (x) What do you mean by serializability ?

Section-B

2. Explain the concept of database architecture.

Or

Describe data models with any *two* types.

3. Draw an ER diagram for Indian Court System (say High Court). You may take suitable assumptions. Mention the assumptions you consider while designing the ER diagram.

Or

When a table is said to be in BCNF ?

4. Explain the concept of join property with suitable examples.

Or

How does indexing work ? Explain.

5. Create a table named BALLB with attributes no_of_students, max_percentage, min_percentage, placement_percentage, max_salary, min_salary. Insert 2 rows of two your choice in the table. Use SQL commands to do the same.

Or

Explain, how union operation can be implemented on tables using SQL commands ?

6. Explain ACID properties with suitable examples.

Or

Describe 2PL, lock based concurrency control technique.

Section–C

7. Explain 12 Codd's rules in detail.
8. Describe the process of creating table from ER diagram.
9. Explain the concept of setting relationship between tables.
10. Explain the following SQL queries/commands :
- (i) Truncate
 - (ii) Update
 - (iii) Delete
 - (iv) Alter
 - (v) Except
11. Explain database recovery management in detail.